Small Business Innovation Research/Small Business Tech Transfer

Data Description Exchange Services for Heterogeneous Vehicle and Spaceport Control and Monitor Systems, Phase I



Completed Technology Project (2004 - 2004)

Project Introduction

CCT proposes an advanced data description exchange approach for space/spaceport systems that will provide a generic platform independent software capability for exchange of semantic control and monitoring information. This new strategy will reduce development, operations, and support costs for legacy and future systems that are part of ground and space based distributed control systems. It will also establish a space systems information exchange model that can support future highly interoperable and mobile software systems. The concept seeks to provide a solution that will ease the adoption of a common data definition and exchange standard for legacy and future systems by minimizing or eliminating the need for custom software modifications. Phase 1 of the research will determine the viability of creating common access services for the space ground systems domain based on use of emerging exchange standards for telemetry, and drive out architecture strategies for cross platform generation of monitoring (e.g. health and status) service middleware. Phase 2 will seek to expand the scope of the target domain to also include control services and create a complete usable suite of services for a broader range of heterogeneous systems.

Primary U.S. Work Locations and Key Partners





Data Description Exchange Services for Heterogeneous Vehicle and Spaceport Control and Monitor Systems, Phase I

Table of Contents

Project Introduction		
Primary U.S. Work Locations		
and Key Partners	1	
Organizational Responsibility		
Project Management		
Technology Areas	2	

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Kennedy Space Center (KSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer



Small Business Innovation Research/Small Business Tech Transfer

Data Description Exchange Services for Heterogeneous Vehicle and Spaceport Control and Monitor Systems, Phase I



Completed Technology Project (2004 - 2004)

Organizations Performing Work	Role	Туре	Location
★Kennedy Space	Lead	NASA	Kennedy Space
Center(KSC)	Organization	Center	Center, Florida
Command and Control	Supporting	Industry	Titusville,
Technologies Inc	Organization		Florida

Florida

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Rodney A Davis

Technology Areas

Primary:

- TX06 Human Health, Life Support, and Habitation Systems
 - ─ TX06.2 Extravehicular Activity Systems
 - □ TX06.2.3 Informatics and Decision Support Systems
 ☐ TX06.2.3 Informatics
 ☐ TX06.2.3 Informatics

